



Security Council

Distr.: General
25 February 2011

Original: English

Note by the President of the Security Council

At its 6335th meeting, held on 9 June 2010 in connection with the item entitled "Non-proliferation", the Security Council adopted resolution 1929 (2010).

In paragraph 4 of the resolution, the Security Council requested the Director General of the International Atomic Energy Agency to communicate to the Security Council all his reports on the application of safeguards in the Islamic Republic of Iran.

Accordingly, the President herewith circulates the report of the Director General dated 25 February 2011 (see annex).



Annex

Letter dated 25 February 2011 from the Director General of the International Atomic Energy Agency addressed to the President of the Security Council

I enclose herewith the report requested by the Security Council in its resolution 1929 (2010), which I have submitted today to the Board of Governors of the International Atomic Energy Agency (see enclosure).

I should be grateful if you would bring this letter and the enclosed report to the attention of all members of the Security Council.

(Signed) Yukiya Amano

Enclosure*

Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions in the Islamic Republic of Iran

Report by the Director General

A. Introduction

1. This report of the Director General to the Board of Governors and, in parallel, to the Security Council, is on the implementation of the NPT Safeguards Agreement,¹ and relevant provisions of Security Council resolutions in the Islamic Republic of Iran (Iran), which were adopted under Chapter VII of the United Nations Charter, and are mandatory, in accordance with the terms of those resolutions.²

2. By virtue of its Relationship Agreement with the United Nations,³ the Agency is required to cooperate with the Security Council by furnishing to it at its request such information and assistance as may be required by the Security Council in the exercise of its responsibility for the maintenance or restoration of international peace and security. Furthermore, all Members of the United Nations, including Iran and other Members of the Agency, "agree to accept and carry out the decisions of the Security Council",⁴ and in this respect, to take actions which are consistent with their obligations under the United Nations Charter.

3. The Security Council has affirmed that the steps required by the Board of Governors in its resolutions⁵ are binding on Iran.⁶

* Circulated to the Board of Governors of the International Atomic Energy Agency under the symbol GOV/2011/7.

¹ The Agreement between Iran and the Agency for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons (INFCIRC/214), which entered into force on 15 May 1974.

² The United Nations Security Council has adopted the following resolutions on Iran: 1696 (2006); 1737 (2006); 1747 (2007); 1803 (2008); 1835 (2008); and 1929 (2010).

³ The Agreement Governing the Relationship between the United Nations and the IAEA entered into force on 14 November 1957, following approval by the General Conference, upon recommendation of the Board of Governors, and approval by the General Assembly of the United Nations. It is reproduced in INFCIRC/11 (30 October 1959), Part I.A.

⁴ The Charter of the United Nations, Article 25.

⁵ The Board of Governors has adopted ten resolutions in connection with the implementation of safeguards in Iran: GOV/2003/69 (12 September 2003); GOV/2003/81 (26 November 2003); GOV/2004/21 (13 March 2004); GOV/2004/49 (18 June 2004); GOV/2004/79 (18 September 2004); GOV/2004/90 (29 November 2004); GOV/2005/64 (11 August 2005); GOV/2005/77 (24 September 2005); GOV/2006/14 (4 February 2006); and GOV/2009/82 (27 November 2009).

⁶ In resolution 1929 (2010), the Security Council affirmed, inter alia, that Iran shall, without further delay, take the steps required by the Board in GOV/2006/14 and GOV/2009/82; reaffirmed Iran's obligation to cooperate fully with the IAEA on all outstanding issues, particularly those which give rise to concerns about the possible military dimensions of the Iranian nuclear programme; decided that Iran shall, without delay, comply fully and without qualification with its Safeguards Agreement, including through the application of modified Code 3.1 of the Subsidiary Arrangements; and called upon Iran to act strictly in accordance with the provisions of its Additional Protocol and to ratify it promptly (operative paras. 1-6).

4. This report focuses on those areas where Iran has not fully implemented its binding obligations, as the full implementation of these obligations is needed to establish international confidence in the exclusively peaceful nature of Iran's nuclear programme. It addresses developments since the last report, as well as issues of longer standing, and contains an Attachment that provides an overview of the current implementation of Iran's Safeguards Agreement and relevant provisions of Security Council resolutions in Iran.

B. Facilities Declared under Iran's Safeguards Agreement

5. Iran has declared to the Agency under its Safeguards Agreement, 16 nuclear facilities and nine locations outside facilities where nuclear material is customarily used (LOFs).⁷ The Agency continues to verify the non-diversion of declared nuclear material at these facilities and LOFs. Notwithstanding, certain of the activities being undertaken by Iran at some of the facilities are contrary to relevant resolutions of the Board of Governors and the Security Council, as indicated below.

C. Enrichment Related Activities

6. Contrary to the relevant resolutions of the Board of Governors and the Security Council, Iran has not suspended its enrichment related activities in the following declared facilities, which are under Agency safeguards.

C.1. Natanz: Fuel Enrichment Plant and Pilot Fuel Enrichment Plant

7. **Fuel Enrichment Plant (FEP):** There are two cascade halls at FEP: Production Hall A and Production Hall B. According to the design information submitted by Iran, eight units are planned for Production Hall A, with 18 cascades in each unit. No detailed design information has yet been provided for Production Hall B.

8. On 20 February 2011, 53 cascades were installed in three of the eight units in Production Hall A, 31 of which were being fed with UF₆.⁸ Initially, each installed cascade comprised 164 centrifuges. Iran has now modified 12 of the cascades to contain 174 centrifuges each. To date, all the centrifuges installed are IR-1 machines. As of 20 February 2011, installation work in the remaining five units was ongoing, but no centrifuges had been installed. There had been no installation work in Production Hall B.

9. As reported previously, the Agency conducted a physical inventory verification (PIV) at FEP and verified that, as of 17 October 2010, 34,737 kg of natural UF₆ had been fed into the cascades since the start of operations in February 2007, and a total of 3,135 kg of low enriched UF₆ had been produced. While the Agency has verified the UF₆ throughput of the facility as declared by Iran, the evaluation of the nuclear material balance remains ongoing.

⁷ All of the LOFs are situated within hospitals.

⁸ On 20 February 2011, the 53 installed cascades contained approximately 8,000 centrifuges. The 31 cascades being fed with UF₆ on that date contained a total of 5184 centrifuges, some of which were possibly not being fed with UF₆.

10. Iran has estimated that, between 18 October 2010 and 5 February 2011, it produced an additional 471 kg of low enriched UF₆, which would result in a total production of 3,606 kg of low enriched UF₆ since February 2007. The nuclear material at FEP (including the feed, product and tails), as well as all installed cascades and the feed and withdrawal stations, are subject to Agency containment and surveillance.⁹

11. Based on the results of the analysis of environmental samples taken at FEP since February 2007¹⁰ and other verification activities, the Agency has concluded that the facility has operated as declared by Iran in the Design Information Questionnaire (DIQ).

12. **Pilot Fuel Enrichment Plant (PFEP):** PFEP is a research and development (R&D) facility and a pilot, low enriched uranium (LEU) production facility which was first brought into operation in October 2003. It has a cascade hall that can accommodate six cascades, and is divided between an area designated for the production of LEU enriched up to 20 per cent U-235 and an area designated for R&D.

13. In the production area, Iran first began feeding low enriched UF₆ into Cascade 1 on 9 February 2010, for the stated purpose of producing UF₆ enriched up to 20 per cent U-235 for use in the manufacture of fuel for the Tehran Research Reactor (TRR).^{11,12} Since 13 July 2010, Iran has been feeding low enriched UF₆ into two interconnected cascades (Cascades 1 and 6), each of which comprises 164 centrifuges.

14. As reported previously, the Agency conducted a PIV at PFEP and verified that, as of 18 September 2010, 352 kg of low enriched UF₆ had been fed into the cascades in the production area since 9 February 2010, and that a total of 25.1 kg of UF₆ enriched up to 20 per cent U-235 had been produced. The enrichment level of the UF₆ product, as measured by the Agency, was 19.7 per cent. The Agency has completed its evaluation of the results of the PIV, and can confirm the inventory of total uranium as declared by Iran. The Agency is discussing with Iran further improvements to the operator's measurement system, especially in the determination of the level of U-235 enrichment.

15. Iran has estimated that, between 19 September 2010 and 11 February 2011, a total of 135.2 kg of UF₆ enriched at FEP was fed into the two interconnected cascades and that approximately 18.5 kg of UF₆ enriched up to 20 per cent U-235 was produced. This would result in a total of approximately 43.6 kg of UF₆ enriched up to 20 per cent U-235 having been produced since the process began in February 2010.

16. In the R&D area, between 20 November 2010 and 11 February 2011, a total of approximately 169 kg of natural UF₆ was fed into centrifuges, but no LEU was

⁹ In line with normal safeguards practice, small amounts of nuclear material at the facility (e.g. some waste and samples) are not subject to containment and surveillance.

¹⁰ Results are available to the Agency for samples taken up to 20 July 2010.

¹¹ GOV/2010/28, para. 9.

¹² TRR is a 5 MW reactor which operates with 20 per cent U-235 enriched fuel and is used for the irradiation of different types of targets and for research and training purposes.

withdrawn as the product and the tails of this R&D activity are recombined at the end of the process.¹³

17. In an updated DIQ for PFEP submitted to the Agency on 19 January 2011, Iran indicated that it would install two new 164-centrifuge cascades (Cascades 4 and 5) in the R&D area. These two cascades, one of which will comprise IR-4 centrifuges and the other IR-2m centrifuges, will be fed with natural UF₆.

18. Based on the results of the analysis of the environmental samples taken at PFEP¹⁴ and other verification activities, the Agency has concluded that the facility has operated as declared by Iran in the DIQ.

C.2. Fordow Fuel Enrichment Plant

19. In September 2009, Iran informed the Agency that it was constructing the Fordow Fuel Enrichment Plant (FFEP), located near the city of Qom. In its DIQ of 10 October 2009, Iran stated that the purpose of the facility was the production of UF₆ enriched up to 5.0 per cent U-235, and that the facility was being built to contain 16 cascades, with a total of approximately 3,000 centrifuges.¹⁵ In September 2010, Iran provided the Agency with a revised DIQ in which it stated that the purpose of FFEP was now to include R&D as well as the production of UF₆ enriched up to 5.0 per cent U-235.¹⁶

20. The Agency has asked Iran on a number of occasions, most recently in a letter dated 11 February 2011, to provide supporting information regarding the chronology of the design and construction of FFEP, as well as its original purpose, particularly in light of extensive information from a number of sources alleging that design work on the facility had started in 2006. To date, Iran has not done so. The information requested is essential for the Agency to confirm that the declarations of Iran are correct and complete.¹⁷

21. The Agency has verified that the construction of FFEP is ongoing. As of 19 February 2011, no centrifuges had been introduced into the facility. The results of the analysis of the environmental samples taken at FFEP up to February 2010 did not indicate the presence of enriched uranium.¹⁸ On 21 February 2011, Iran informed the Agency that it planned to begin feeding nuclear material into cascades "by this summer".

C.3. Other Enrichment Related Activities

22. The Agency is still awaiting a substantive response from Iran to Agency requests for further information in relation to announcements made by Iran concerning the construction of ten new uranium enrichment facilities, the sites for

¹³ On 11 February 2011, the centrifuges being tested in the R&D area were IR-1, IR-2m and IR-4 machines.

¹⁴ Results are available to the Agency for samples taken up to 12 September 2010.

¹⁵ GOV/2009/74, para. 9.

¹⁶ GOV/2010/62, para. 16.

¹⁷ As previously reported, in Iran's initial declaration regarding the purpose of FFEP, contained in a letter dated 2 December 2009, Iran stated that, "The location [near Qom] originally was considered as a general area for passive defence contingency shelters for various utilizations. Then this location was selected for the construction of [the] Fuel Enrichment Plant in the second half of 2007" (GOV/2010/10, paras. 14-16).

¹⁸ The results did show a small number of particles of depleted uranium (GOV/2010/10, para. 17).

five of which, according to Iran, have been decided, and the construction of one of which will begin by the end of the current Iranian year (20 March 2011) or the start of the next year.^{19,20}

23. Iran has not provided further information, as requested by the Agency, in connection with its announcement on 7 February 2010 that it possessed laser enrichment technology,²¹ and its announcement on 9 April 2010 regarding the development of third generation centrifuges.²²

24. Since early 2008, Iran has not responded to Agency requests for access to additional locations related, inter alia, to the manufacturing of centrifuges, and to R&D on uranium enrichment.²³ As a result, the Agency's knowledge about Iran's enrichment activities continues to diminish.

D. Reprocessing Activities

25. Pursuant to the relevant resolutions of the Board of Governors and the Security Council, Iran is obliged to suspend its reprocessing activities, including R&D.²⁴ In a letter to the Agency dated 15 February 2008, Iran stated that it "does not have reprocessing activities". In that context, the Agency has continued to monitor the use of hot cells at TRR and the Molybdenum, Iodine and Xenon Radioisotope Production (MIX) Facility.²⁵ The Agency carried out an inspection and design information verification (DIV) at TRR on 5 February 2011 and a DIV at the MIX Facility on 6 February 2011. In light of the above, the Agency can confirm that there are no ongoing reprocessing related activities in Iran only with respect to the TRR and the MIX Facility, and the other facilities to which the Agency has access.

E. Heavy Water Related Projects

26. Contrary to the relevant resolutions of the Board of Governors and the Security Council, Iran has not suspended work on all heavy water related projects, including the construction of the heavy water moderated research reactor, the IR-40 Reactor, which is under Agency safeguards.²⁶

27. As indicated in the Director General's previous reports, in light of the request by the Security Council to report to it on whether Iran has established full and sustained suspension of, inter alia, all heavy water related projects,²⁷ the Agency

¹⁹ "Iran Specifies Location for 10 New Enrichment Sites", Fars News Agency, 16 August 2010.

²⁰ GOV/2010/46, para. 33.

²¹ Cited on the website of the Presidency of the Islamic Republic of Iran, 7 February 2010, at <http://www.president.ir/en/?ArtID=20255>.

²² GOV/2010/28, para. 18.

²³ GOV/2008/15, para. 13.

²⁴ S/RES/1696 (2006), para. 2; S/RES/1737 (2006), para. 2; S/RES/1747 (2007), para. 1; S/RES/1803 (2008), para. 1; S/RES/1835 (2008), para. 4; S/RES/1929 (2010), para. 2.

²⁵ The MIX Facility is a hot cell complex for the separation of radiopharmaceutical isotopes from targets, including uranium, irradiated at TRR. The MIX Facility is not currently processing any uranium targets.

²⁶ S/RES/1737 (2006), para. 2; S/RES/1747 (2007), para. 1; S/RES/1803 (2008), para. 1; S/RES/1835 (2008), para. 4; S/RES/1929 (2010), para. 2.

²⁷ S/RES/1737 (2006), para. 23; S/RES/1747 (2007), para. 12; S/RES/1803 (2008), para. 18; S/RES/1929 (2010), para. 36.

has requested that Iran make the necessary arrangements to provide the Agency, at the earliest possible date, with access to: the Heavy Water Production Plant (HWPP);²⁸ the heavy water stored at the Uranium Conversion Facility (UCF) for the taking of samples;²⁹ and any other location in Iran where projects related to heavy water are being carried out. Iran has objected to the Agency's requests on the basis that they go beyond the Safeguards Agreement and because Iran has already stated that it has not suspended its heavy water related projects.³⁰ In paragraph 8 of Security Council resolution 1737 (2006), the Council decided that "Iran shall provide such access and cooperation as the IAEA requests to be able to verify the suspension outlined in paragraph 2 [of that resolution] ...". To date, Iran has not provided the requested access.

28. While the Agency can report that Iran has made statements to the effect that it has not suspended work on all its heavy water related projects, without full access to the heavy water at UCF and to HWPP, the Agency is unable to verify such statements and therefore to report fully on this matter.

29. On 13 February 2011, the Agency carried out a DIV at the IR-40 Reactor at Arak and observed that, although construction of the facility was ongoing, no significant changes had occurred since the Director General's last report.³¹ According to Iran, the operation of the IR-40 Reactor is planned to commence by the end of 2013.

F. Uranium Conversion and Fuel Fabrication

30. As indicated above, Iran is obliged to suspend all enrichment related activities and heavy water related projects. Some of the activities carried out by Iran at UCF and the Fuel Manufacturing Plant (FMP) at Esfahan are in contravention of that obligation, although both facilities are under Agency safeguards.

31. In a letter dated 6 February 2011, Iran informed the Agency that in mid-February 2011 it intended to start conducting cold tests at UCF (not involving the use of nuclear material) for the production of natural UO_2 for IR-40 Reactor fuel.

32. On 8-9 February 2011, the Agency carried out an inspection and a DIV at UCF. At that time, the plant was still undergoing maintenance. As no UF_6 has been produced at UCF since 10 August 2009, the total amount of uranium produced at UCF since March 2004 remains 371 tonnes in the form of UF_6 (some of which has been transferred to FEP and PFEP), and remains subject to Agency containment and surveillance. During the DIV, the Agency observed that Iran had not yet begun the installation of equipment for the conversion of the UF_6 enriched up to 20 per cent U-235 into U_3O_8 for the fabrication of fuel for TRR.³² Iran stated that the installation of this equipment will be completed by July 2011. During the DIV, the Agency also observed seven 200-litre drums, which Iran stated contained yellowcake produced at Bandar Abbas.

²⁸ Based on satellite imagery, the HWPP appears to be in operation.

²⁹ GOV/2010/10, paras. 20 and 21.

³⁰ GOV/2010/62, para. 21.

³¹ GOV/2010/62, para. 22.

³² GOV/2010/46, para. 25.

33. On 12 February 2011, the Agency carried out an inspection and a DIV at FMP and confirmed that Iran had not yet started to install equipment for TRR fuel fabrication.³³ In a letter dated 31 January 2011, Iran provided an updated DIQ for FMP, including more details concerning the manufacture of fuel for TRR, which the Agency is currently reviewing.

G. Possible Military Dimensions

34. The Board of Governors has called on Iran on a number of occasions to engage with the Agency on the resolution of all outstanding issues concerning Iran's nuclear programme and, to this end, to cooperate fully with the Agency by providing such access and information that the Agency requests to resolve these issues. The Board has also requested the Director General to continue his efforts to, inter alia, resolve the outstanding issues which give rise to concerns, in order to exclude the existence of possible military dimensions to Iran's nuclear programme.³⁴ In resolution 1929 (2010), the Security Council reaffirmed Iran's obligations to take the steps required by the Board of Governors in its resolutions GOV/2006/14 and GOV/2009/82, and to cooperate fully with the Agency on all outstanding issues, particularly those which give rise to concerns about the possible military dimensions, including by providing access without delay to all sites, equipment, persons and documents requested by the Agency.³⁵

35. Previous reports by the Director General have detailed the outstanding issues related to possible military dimensions to Iran's nuclear programme and the actions required of Iran necessary to resolve these.³⁶ Since August 2008, Iran has declined to discuss these outstanding issues with the Agency, or to provide any further information, or access to locations or persons necessary to address the Agency's concerns.

36. As Iran has been informed previously, although most of the actions identified in the 2007 work plan agreed between Iran and the Agency (INFCIRC/711) have been completed, there remain issues that still need to be addressed. According to the work plan, Iran was required to provide the Agency with its assessment of the documentation related to the alleged studies to which the Agency had provided Iran access. In May 2008, Iran provided a 117-page assessment in which it asserted that the documentation was forged and fabricated. However, as the Agency considers this assessment to be focused on form rather than substance, it has on several subsequent occasions requested Iran to provide a substantive response. Iran has not yet done so. Moreover, based on the Agency's analysis of additional information which has come to its attention since August 2008, including new information recently received, there are further concerns which the Agency also needs to clarify with Iran. For these reasons the Agency is unable to consider the issue of the alleged studies as referred to in the work plan as being closed.

37. Based on the Agency's continued study of information which the Agency has acquired, not only from many Member States but also directly through its own

³³ GOV/2010/46, para. 26.

³⁴ Most recently in GOV/2009/82 (27 November 2009).

³⁵ S/RES/1929, paras. 2 and 3.

³⁶ GOV/2010/10, paras. 40-45; GOV/2009/55, paras. 18-25; GOV/2008/38, paras. 14-21; GOV/2008/15, paras. 14-25 and Annex; GOV/2008/4, paras. 35-42.

efforts, the Agency remains concerned about the possible existence in Iran of past or current undisclosed nuclear related activities involving military related organizations, including activities related to the development of a nuclear payload for a missile. As previously indicated by the Director General, there are indications that certain of these activities may have continued beyond 2004.³⁷

38. The Agency has yet to receive a reply to its letter dated 29 October 2010, in which it again reiterated its concerns to Iran and provided a list of those matters which remain to be addressed. These matters include a number of issues that have come to the Agency's attention since August 2008.³⁸

39. The Agency has continued to request that Iran engage with the Agency on these issues, and that the Agency be permitted to visit all relevant sites, have access to all relevant equipment and documentation, and be allowed to interview all relevant persons, without further delay. The passage of time and the possible deterioration in the availability of some relevant information increase the urgency of this matter. Iran's substantive and proactive engagement is essential to enable the Agency to make progress in its verification of the correctness and completeness of Iran's declarations.

H. Design Information

40. The modified Code 3.1 of the Subsidiary Arrangements General Part to Iran's Safeguards Agreement provides for the submission to the Agency of design information for new facilities as soon as the decision to construct, or to authorize construction of, a new facility has been taken, whichever is the earlier. The modified Code 3.1 also provides for the submission of fuller design information as the design is developed early in the project definition, preliminary design, construction, and commissioning phases. Iran remains the only State with significant nuclear activities in which the Agency is implementing a comprehensive safeguards agreement but which is not implementing the provisions of the modified Code 3.1.³⁹ The existence of FFEP was only reported to the Agency after the plant had reached an advanced stage of its construction. Furthermore, the Agency is still awaiting receipt from Iran of, *inter alia*, updated design information for the IR-40 Reactor, and further information pursuant to statements it has made concerning the planned construction of new uranium enrichment facilities and the design of a reactor similar to TRR.⁴⁰

³⁷ GOV/2010/62, para. 33; GOV/2010/46, para. 39.

³⁸ GOV/2010/62, para. 35.

³⁹ In accordance with Article 39 of Iran's Safeguards Agreement, agreed Subsidiary Arrangements cannot be changed unilaterally; nor is there a mechanism in the Safeguards Agreement for the suspension of provisions agreed to in the Subsidiary Arrangements. Therefore, as previously explained in the Director General's reports (see e.g. GOV/2007/22, 23 May 2007), the modified Code 3.1, as agreed to by Iran in 2003, remains in force for Iran. Iran is further bound by operative paragraph 5 of Security Council resolution 1929 (2010) to "comply fully and without qualification with its IAEA Safeguards Agreement, including through the application of modified Code 3.1".

⁴⁰ GOV/2010/62, para. 30.

I. Additional Protocol

41. Iran is not implementing its Additional Protocol, contrary to the relevant resolutions of the Board of Governors and the Security Council.⁴¹ Unless Iran implements its Additional Protocol, the Agency will not be in a position to provide credible assurance about the absence of undeclared nuclear material and activities in Iran.

J. Other Matters

42. On 15-16 February 2011, the Agency conducted an inspection at the Bushehr Nuclear Power Plant (BNPP) and has verified the nuclear material present in the facility. On 23 February 2011, Iran informed the Agency that it would have to unload fuel assemblies from the core, and the Agency and Iran have agreed on the necessary safeguards measures.

43. Consistent with Iran's declarations of 22 September 2009,⁴² the Agency, through satellite imagery, has not observed any indications of construction activities having been initiated at the site of the planned 360 MW Nuclear Power Plant at Darkhovin.

44. Based on satellite imagery, the Agency assesses that activities involving the mining and concentration of uranium are continuing in the area of the Bandar Abbas Uranium Production Plant, and that construction activities are continuing at the Ardakan Yellowcake Production Plant and at the Saghand Uranium Mine.

45. Iran has not agreed to reconsider its decision of 16 January 2007 to request the Agency to withdraw the designation of 38 Agency inspectors and its requests (in 2006, 2007 and 2010) to withdraw the designations of a total of four other inspectors with experience in conducting inspections in Iran. Nevertheless, in a letter dated 12 January 2011, Iran accepted the designation of three additional inspectors, who will now need to familiarize themselves with Iran's nuclear programme and gain experience in implementing safeguards in Iran.

K. Summary

46. While the Agency continues to conduct verification activities under Iran's Safeguards Agreement, Iran is not implementing a number of its obligations, including: implementation of the provisions of its Additional Protocol; implementation of the modified Code 3.1 of the Subsidiary Arrangements General Part to its Safeguards Agreement; suspension of enrichment related activities; suspension of heavy water related activities; and clarification of the remaining outstanding issues which give rise to concerns about possible military dimensions to its nuclear programme.

⁴¹ Iran's Additional Protocol was approved by the Board on 21 November 2003 and signed by Iran on 18 December 2003, although it has not been brought into force. Iran provisionally implemented its Additional Protocol between December 2003 and February 2006.

⁴² GOV/2009/74, para. 26.

47. While the Agency continues to verify the non-diversion of declared nuclear material at the nuclear facilities and LOFs declared by Iran under its Safeguards Agreement, Iran is not providing the necessary cooperation to enable the Agency to provide credible assurance about the absence of undeclared nuclear material and activities in Iran, and therefore to conclude that all nuclear material in Iran is in peaceful activities.⁴³

48. The Director General requests Iran to take steps towards the full implementation of its Safeguards Agreement and its other obligations, to establish international confidence in the exclusively peaceful nature of Iran's nuclear programme.

49. The Director General will continue to report as appropriate.

⁴³ The Board has confirmed on numerous occasions, since as early as 1992, that paragraph 2 of INFCIRC/153 (Corr.), which corresponds to Article 2 of Iran's Safeguards Agreement, authorizes and requires the Agency to seek to verify both the non-diversion of nuclear material from declared activities (i.e. correctness) and the absence of undeclared nuclear activities in the State (i.e. completeness) (see, for example, GOV/OR.864, para. 49). Paragraph 47 reflects the past and current implementation by Iran of its Safeguards Agreement and other obligations.

Attachment**Overview of the implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions in Iran***

1. **Facilities which Iran has declared under its Safeguards Agreement and where the Agency continues to verify the non-diversion of declared nuclear material**

Tehran:

- Tehran Research Reactor (TRR)
- Molybdenum, Iodine and Xenon Radioisotope Production Facility (MIX Facility)
- Jabr Ibn Hayan Multipurpose Laboratories (JHL)

Esfahan:

- Miniature Neutron Source Reactor (MNSR)
- Light Water Sub-Critical Reactor (LWSCR)
- Heavy Water Zero Power Reactor (HWZPR)
- Fuel Fabrication Laboratory (FFL)
- Uranium Conversion Facility (UCF)
- Fuel Manufacturing Plant (FMP)

Natanz:

- Fuel Enrichment Plant (FEP)
- Pilot Fuel Enrichment Plant (PFEP)

Fordow:

- Fordow Fuel Enrichment Plant (FFEP)

Arak:

- Iran Nuclear Research Reactor (IR-40 Reactor)

Karaj:

- Karaj Waste Storage

Bushehr:

- Bushehr Nuclear Power Plant (BNPP)

Darkhovin:

- 360 MW Nuclear Power Plant

* For details, see this report and previous reports by the Director General.

Locations outside facilities (LOFs):

- Nine LOFs where nuclear material is customarily used (all situated within hospitals)
- 2. **Iran is not conducting reprocessing activities in any of the facilities declared under its Safeguards Agreement, thereby meeting one of its obligations pursuant to the relevant provisions of the UN Security Council resolutions**
- 3. **Areas where Iran is not meeting its obligations, as indicated in this report and previous reports of the Director General**

Iran has not suspended its enrichment related activities as follows:

- Production of UF₆ at UCF as feed material for enrichment
- Manufacturing centrifuge components, and assembling and testing centrifuges
- Conducting enrichment related research and development
- Conducting operations, installation work and the production of LEU up to 3.5 per cent U-235 at the Fuel Enrichment Plant (FEP)
- Conducting operations, installation work and the production of LEU up to 20 per cent U-235 at the Pilot Fuel Enrichment Plant (PFEP)
- Conducting construction work at the Fordow Fuel Enrichment Plant (FFEP)

Iran is not providing supporting information regarding the chronology of the design and construction, as well as the original purpose, of FFEP

Iran has not suspended work on heavy water related projects as follows:

- Continuing the construction of the IR-40 Reactor
- Production of heavy water at the Heavy Water Production Plant (HWPP)
- Preparing for conversion activities for the production of natural UO₂ for IR-40 Reactor fuel
- Manufactured a fuel assembly, fuel rods and fuel pellets for the IR-40 Reactor

Iran has not permitted the Agency to verify suspension of its heavy water related projects by:

- Not permitting the Agency to take samples of the heavy water stored at UCF
- Not providing access to HWPP

Iran is not cooperating with the Agency regarding the outstanding issues which give rise to concern about possible military dimensions to Iran's nuclear programme:

- Iran is not providing access to relevant locations, equipment, persons or documentation related to possible military dimensions to Iran's nuclear programme; nor has Iran responded to the many questions the Agency has raised with Iran regarding procurement of nuclear related items

- Iran is not engaging with the Agency in substance on issues concerning the allegation that Iran is developing a nuclear payload for its missile programme. These issues refer to activities in Iran dealing with, inter alia:

- neutron generation and associated diagnostics
- uranium conversion and metallurgy
- high explosives manufacturing and testing
- exploding bridgewire detonator studies, particularly involving applications necessitating high simultaneity
- multipoint explosive initiation and hemispherical detonation studies involving highly instrumented experiments
- high voltage firing equipment and instrumentation for explosives testing over long distances and possibly underground
- missile re-entry vehicle redesign activities for a new payload assessed as being nuclear in nature

Iran is not providing the requisite design information in accordance with the modified Code 3.1 in connection with:

- The IR-40 Reactor
- The announced new enrichment facilities
- The announced new reactor similar to TRR

Iran is not implementing its Additional Protocol
